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Patent Claims:

- 1. A process for purification of waste oil or re-refined oil from mineral or synthetic oil comprising the steps of:
 - prefiltrating said oil,
 - passing the prefiltrated oil through a filtering unit in which the filter medium comprises organic fibres and carbon particles, said organic fibres and carbon particles being adhered to each other by a binder.
- 10 2. A process according to claim 1, wherein the oil is prefiltrated by passing the oil through one or more prefiltration units.
 - 3. A process according to claim 1, wherein the oil is prefiltrated by passing the oil through three prefiltration units.
 - 4. A process according to claim 3, wherein the first prefiltration unit is trapping particles bigger than approximately 12 μ m, the second prefiltration unit is trapping particles bigger than approximately 6 μ m, and the third prefiltration unit is trapping particles bigger than approximately 1 μ m.
 - 5. A process according to any one of the claims 1-4, wherein the prefiltration units remove particles with decreasing sizes in the direction of the flow.
- 6. A process according to any one of the claims 1-5, wherein the prefiltration is performed by using a filtering medium made of glass fibres.
 - 7. A process according to any one of the claims 1-6, wherein the prefiltrated oil is passed through one or more filtering units.
- 30 8. A process according to any one of the claims 1-7, wherein the filtering medium in the filtering unit contains 5-95% carbon based on the weight of carbon particles and organic fibres.

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- 9. A process according to any one of the claims 1-8, wherein the fibres in the filtering unit are natural fibres preferably cellulosic fibres.
- 10. A process according to any one of the claims 1-9, wherein the binder is a positively charged resin.
 - 11. A process according to any one of the claims 1-10, wherein the organic fibres, the carbon particles and the binder are in the form of a filtering plate.
- 10 12. A process according to claim 11, wherein the filtering plate is supported downstream by a net, preferably a net of plastic or steel.
 - 13. A process according to any one of the claims 1-12, wherein the oil is passed through one or more vacuum units after passing through the prefiltration units and before passing through the filtering unit.
 - 14. A process according to any one of the claims 1-13, wherein the oil is heated to a temperature of 50-90°C before passing the prefiltration units.
- 20 15. A process according to any one of the claims 1-14, wherein the oil is cooled immediately before passing through the filtering unit.
 - 16. A process according to claim 15, wherein the oil is cooled to a temperature of 10-30 °C.
 - 17. A process according to any one of the claims 1-16, wherein the oil is forced through the treatment steps by the use of a pump.
- 18. An apparatus for the purification of waste oil or re-refined oil from mineral30 or synthetic oil comprising
 - means for prefiltrating said oil and

- a filtering unit in which the filtering medium comprises organic fibres and carbon particles, said organic fibres and carbon particles being adhered to each other by a binder.
- 5 19. An apparatus according to claim 18, wherein the filtering medium in the filtering unit contains 5-95% carbon based on the weight of carbon particles and fibres.
- 20. An apparatus according to claim 18 or 19, wherein the fibres in the filtering unit are natural fibres, preferably cellulosic fibres.
 - 21. An apparatus according to any one of the claims 18-20, wherein the binder is a positively charged resin.
- 15 22. An apparatus according to any one of the claims 18-22, wherein the organic fibres, the carbon particles and the binder are in the form of a filtering plate.
- 23. An apparatus according to claim 22, wherein the filtering plate is supported downstream by a net preferably made of plastic or steel.
 - 24. An apparatus according to any one of the claims 18-23, wherein said means for prefiltrating comprises one or more prefiltration units.
- 25 25. An apparatus according to claim 24, wherein said prefiltration units remove particles with decreasing size in the direction of the flow.
 - 26. An apparatus according to any one of the claims 18-25, wherein the prefiltration means comprise three prefiltration units.
 - 27. An apparatus according to claim 26, wherein the first unit is trapping particles bigger than approximately 12 μm , the second prefiltration unit is

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trapping particles bigger than approximately 6 μ m, and the third prefiltration unit is trapping particles bigger than approximately 1 μ m.

- 28. An apparatus according to any one of the claims 18-27, wherein the prefiltrating means comprise filters with a filter medium made of glass fibres.
 - 29. An apparatus according to any one of the claims 18-28, wherein said apparatus comprises one or more vacuum units, said vacuum units being placed in the direction of the flow immediately after the prefiltrating means.
- 30. An apparatus according to any one of the claims 18-29, wherein a heater is placed in the direction of the flow immediately before the prefiltrating means.
- 15 31. An apparatus according to any one of the claims 18-30, wherein a cooler is placed in the direction of the flow immediately before the filtering unit.
 - 32. An apparatus according to any one of the claims 18-31 comprising an additional filter, said filter being placed in the direction of flow after the filtering unit.
 - 33. An apparatus according to any one of the claims 18-32 comprising a pump preferably for forcing the oil through the treatment steps.
- 25 34. Use of an apparatus according to any one of the claims 18-33 for the purification of waste oil or re-refined oil from mineral or synthetic oil.